

ABSTRACT OF DISCLOSURE

The present invention aims at maintaining a low dielectric constant in a case of forming an interlayer insulation film by baking SOG. When a plate-like material to be treated W, on the surface of which an applying film is formed, is entered into an apparatus, an elevator means 3 is lowered, so that the plate-like material to be treated W comes close to the cool plate 2, and further N₂ gas is introduced into the apparatus. Then, the oxygen concentration in the atmosphere is reduced to less than or equal to 1% before the surface temperature of the plate-like material to be treated W rises to 200°C. Thereafter, while maintaining the oxygen concentration to be less than or equal to 1%, the elevator means 3 is elevated, so that the plate-like material to be treated W comes close to the hot plate 1, and the surface of the plate-like material to be treated W is heated to be greater than or equal to 400°C. After such a condition is continued for a predetermined period of time, the temperature is lowered. In this instance, the oxygen concentration in the atmosphere is maintained to be less than or equal to 1% until the surface temperature of the plate-like material to be treated W lowers to 200°C.